

REMARKS

Applicants respectfully request entry of the amendments and remarks submitted herein. Claims 1, 4, 6 and 7 have been amended herein, and claims 3 and 9-15 have been canceled without prejudice to continued prosecution. No new matter has been introduced.

Claims 1, 2, 4, 5 and 7 are pending, and claims 6 and 8 are withdrawn as directed toward a non-elected invention. Reconsideration of the pending application is respectfully requested.

The 35 U.S.C. §112 Rejections

Claim 3 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 3 has been canceled herein, thereby rendering the Examiner's rejection moot.

The 35 U.S.C. §102 Rejections

Claims 1 and 2 stand rejected under 35 U.S.C. §102(b) as being anticipated by Roberts et al. (WO 9965924). The Examiner asserted that Roberts et al. disclose oligonucleotide SEQ ID NO:2054 that "is 10 nucleotides in length and is complementary to the region defined by nucleotides 43-86 of SEQ ID NO:1 of the instant invention." Applicants respectfully disagree.

The Roberts et al. reference does not disclose an antisense oligonucleotide that specifically hybridizes within an accessible region of TRPC4 mRNA defined by nucleotides 43 through 86 of SEQ ID NO:1. Rather, the oligonucleotide of SEQ ID NO:2054 contains the exact sequence of nucleotides 71 to 80 of SEQ ID NO:1. As such, the oligonucleotide of SEQ ID NO:2054 is not complementary to nucleotides 43 through 86 of SEQ ID NO:1 and does not specifically hybridize within an accessible region of TRPC4 mRNA. Accordingly, Applicants respectfully request that the rejection of claims 1 and 2 under 35 U.S.C. §102(b) be withdrawn.

Claims 4 and 5 stand rejected under 35 U.S.C. §102(b) as being anticipated by Philipp et al. (2000, *J. Biol. Chem.*, 275(31):23965-72). The Examiner asserted that "Philipp et al. disclose an expression vector, pCAGGS2-TRP4_{anti}, that expresses, under the control of a β actin promoter, an antisense trp4 [equivalent to TRPC4] transcript that inhibits the native form of TRP4."

Claim 4 has been amended to recite that the nucleic acid construct includes a regulatory element operably linked to a nucleic acid encoding a transcript, wherein the transcript consists essentially of 10 to 50 nucleotides and wherein the transcript hybridizes to an accessible region defined by nucleotides 43 through 86 of SEQ ID NO:1. The Philipp et al. reference does not disclose such a nucleic acid construct. Rather, the nucleic acid construct of the Philipp et al. reference includes a regulatory element operably linked to a full-length, bovine TRP4 nucleic acid in antisense orientation. As such, the Philipp et al. reference does not anticipate pending claims 4 and 5. In view of the amendments and remarks herein, Applicants respectfully request that the rejection of claims 4 and 5 under 35 U.S.C. §102(b) be withdrawn.

Rejection under 35 U.S.C. §103

Claim 7 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Philipp et al and Bennett et al (1999, *Biochimica et Biophysica Acta*, 1489:19-30). The Examiner asserted that "Bennett taken with Philipp et al. clearly provides one in the art the motivation to alternatively use an antisense oligonucleotide in place of an expressed antisense transcript where Philipp et al have also recognized that the art has used antisense oligonucleotides in the study of TRP genes and protein function."

Claim 7 has been amended herein to recite that the antisense oligonucleotide specifically hybridizes to an accessible region defined by nucleotides 43 through 86 of SEQ ID NO:1. As discussed above, the Phillip et al. reference discloses a nucleic acid construct that includes a regulatory element operably linked to a full-length, bovine TRP4 nucleic acid in antisense orientation. The Bennett et al. reference is a review of antisense technology. The cited references, alone or in combination, do not indicate that the region defined by nucleotides 43 through 86 of SEQ ID NO:1 would be accessible. As such, the combination of cited references does not direct a person having ordinary skill in the art to make an antisense oligonucleotide that specifically hybridizes to an accessible region defined by nucleotides 43 through 86 of SEQ ID NO:1. In view of the amendments and remarks herein, Applicants respectfully request that the rejection of claim 7 under 35 U.S.C. §103(a) be withdrawn.

Request for Rejoinder

Claims 6 and 8 were withdrawn as directed toward non-elected inventions following the Restriction Requirement of November 22, 2006 and Applicants' election of May 22, 2007. Since claim 1 should be allowable in view of the amendments and remarks herein, Applicants respectfully requests that claims 6 and 8 be rejoined and allowed pursuant to MPEP §821.04(b).

CONCLUSION

For at least the foregoing reasons, Applicants submit that claims 1, 2 and 4-8 are in condition for allowance, which action is respectfully requested. The Examiner is invited to call the undersigned at the telephone number below if such will advance prosecution of this application. Please apply the Petition for Extension of Time fee and any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

/February 22, 2008/

/M. Angela Parsons/

Date: _____

M. Angela Parsons, Ph.D.
Reg. No. 44,282

Fish & Richardson P.C.
60 South Sixth Street, Suite 3300
Minneapolis, MN 55402
Telephone: (612) 335-5070
Facsimile: (612) 288-9696